

[SILICON OXIDE GAP-FILLING PROCESS]

Abstract

A silicon oxide gap-filling process is described, wherein a CVD process having an etching effect is performed to fill up a trench with silicon oxide. The reaction gases used in the CVD process include deposition gases and He/H₂ mixed gas as a sputtering-etching gas, wherein the percentage of the He/H₂ mixed gas in the total reaction gases is raised with the increase of the aspect ratio of the trench.